

Title (en)

METHOD FOR REGULATING THE MASSFLOW OF A VENTILATOR

Title (de)

VERFAHREN ZUR VOLUMENSTROMREGELUNG EINES VENTILATORS

Title (fr)

PROCÉDÉ DE RÉGULATION DE DÉBIT D'UN VENTILATEUR

Publication

EP 3287641 B1 20201209 (DE)

Application

EP 17183804 A 20170821

Priority

DE 102016115617 A 20160823

Abstract (en)

[origin: CN107762954A] The present invention relates to a method of volume flow control of a ventilator driven by a variable speed drive motor; the method comprises the following steps: a. the volumetric flow delivered by the ventilator is measured, wherein the volumetric flow rate is related to the speed of a fan impeller; the impeller driven by the volume flow of the ventilator is provided in the outlet section of the ventilator, the rotation speed of the impeller is detected and the rotation speed is used as a ventilator volume flow reference value; b. at least one ventilator parameter is detected, the at least one ventilator parameter being a drive motor parameter or a fan impeller speed; c. the volumetric flow correction function is determined on the basis of the speed of the impeller and the drive motor parameters and/or fan impeller speed; in order to determine the volumetric flow rate, the volume flow is calculated by using the correction function; d. the speed of the fan impeller is adjusted by the drive motor in order to match the calculated volumetric flow rate to the nominal volumetric flow rate. With this method, the volume flow delivered by the ventilator can be determined and adjusted.

IPC 8 full level

F04D 27/00 (2006.01); **F24F 110/30** (2018.01); **G01F 1/06** (2006.01); **G01F 1/10** (2006.01)

CPC (source: CN EP)

F04D 27/001 (2013.01 - CN EP); **F04D 27/004** (2013.01 - EP); **F24F 11/77** (2017.12 - EP); **F05D 2250/52** (2013.01 - EP);
F05D 2270/3061 (2013.01 - EP); **F24F 2110/30** (2017.12 - EP); **Y02B 30/70** (2013.01 - EP)

Cited by

DE102021115471A1; WO2022263251A1

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)

EP 3287641 A1 20180228; EP 3287641 B1 20201209; CN 107762954 A 20180306; CN 107762954 B 20201208;
DE 102016115617 A1 20180301

DOCDB simple family (application)

EP 17183804 A 20170821; CN 201710724644 A 20170822; DE 102016115617 A 20160823